i) polymerization of a first monomer charge M1 to give a polymer P1 having a theoretical glass transition temperature $T_g^{(1)}$ (according to Fox) and

ii) polymerization of a second monomer charge M2 to give a polymer P2 having a theoretical glass transition temperature $T_g^{(2)}$ (according to Fox) which is different from $T_g^{(1)}$ in the aqueous dispersion of the polymer P1,

at least one chain transfer reagent being used either in the polymerization of the monomer charge M1 or in the polymerization of the monomer charge M2.

Please add the following new Claims 13-18.

13. (New) An aqueous polymer dispersion as claimed in claim 1, wherein the polymer obtained in the presence of the chain transfer agent has a weight-average molecular weight in the range from 20,000 to 200,000, determined by GPC.

14. (New) An aqueous polymer dispersion as claimed in claim 13, wherein the polymer obtained in the presence of the chain transfer agent has a weight-average molecular weight in the range from 30,000 to 100,000, determined by GPC.

15. (New) An aqueous polymer dispersion as claimed in claim 1, wherein the polymer obtained in the absence of the chain transfer reagent has a weight-average molecular weight of above 800,000, determined by GPC.

16. (New) An aqueous polymer dispersion as claimed in claim 15, wherein the polymer obtained in the absence of the chain transfer reagent has a weight-average molecular weight of above 1,000,000, determined by GPC.

17. (New) An aqueous polymer dispersion as claimed in claim 13, wherein the polymer obtained in the absence of the chain transfer reagent has a weight-average molecular weight of above 800,000, determined by GPC.

18. (New) An aqueous polymer dispersion as claimed in claim 14, wherein the polymer obtained in the absence of the chain transfer reagent has a weight-average molecular weight of above 1,000,000, determined by GPC.

IN THE ABSTRACT

Please delete page 29 in its entirety and replace with the following on a separate page: